



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

**IAEA CERTIFICATE OF COMPETENT AUTHORITY  
SPECIAL FORM RADIOACTIVE MATERIALS  
CERTIFICATE NUMBER USA/0046/S, REVISION 5**

This certifies that the sources described below have demonstrated their ability to meet the regulatory requirements for special form radioactive material as prescribed in the regulations of the International Atomic Energy Agency<sup>1</sup> and the United States of America<sup>2</sup> for the transport of radioactive materials.

1. Source Identification - MRC Model No. 2404, restricted to sources manufactured prior to March 31, 2002.
2. Source Description - The source described by this certificate is a stainless steel, tungsten inert gas welded double encapsulation measuring 49 mm (1.93 in) in diameter x 26 mm (1.02 in) long. Both the inner and outer capsules have windows 0.127 mm (0.005 in) thick, with a diameter of 26 mm (1.02 in) for the inner capsule and 33 mm (1.312 in) for the outer capsule. Construction for this gamma source is in accordance with MRC Drawing No. C2404-AA01, Rev. 0 (attached).
3. Radioactive Contents - This source consists of not more than 44.4 GBq (1.2 Ci) of Am-241 as powdered oxide.
4. Special Conditions
  - a. This special form certificate may be used only for transfer of the source for the purpose of recycling or disposal.
  - b. A leak test (standard wipe test method is acceptable) must be performed on the device (source capsule in its source holder) or source capsule itself within one month before any shipment using this certificate, and show no contamination above background.
5. Quality Assurance - Records of Quality Assurance activities required by Paragraph 310 of the IAEA regulations<sup>1</sup> shall be maintained and made available to the authorized officials for at least three years after the last shipment authorized by this certificate. Consignors and consignees in the United States exporting or importing shipments under this certificate shall satisfy the requirements of Subpart H of 10 CFR 71.
6. Expiration Date - This certificate expires May 1, 2007.

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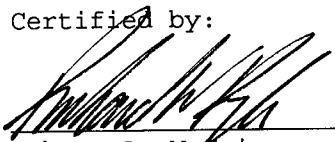
<sup>1</sup> "Regulations for the Safe Transport of Radioactive Material, 1996 Edition (Revised), No. TS-R-1 (ST-1, Revised)," published by the International Atomic Energy Agency (IAEA), Vienna, Austria.

<sup>2</sup> Title 49, Code of Federal Regulations, Parts 100 - 199, United States of America.

**CERTIFICATE USA/0046/S, Revision 5**

This certificate is issued in accordance with paragraph 804 of the IAEA Regulations and Section 173.476 of Title 49 of the Code of Federal Regulations, in response to the petition and information dated July 3, 2001, July 5, 2001, July 10, 2001, and April 10, 2002 submitted by Honeywell Inc., Duluth, GA, and in consideration of other information on file in this Office.

Certified by:

  
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Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

**APR 17 2002**

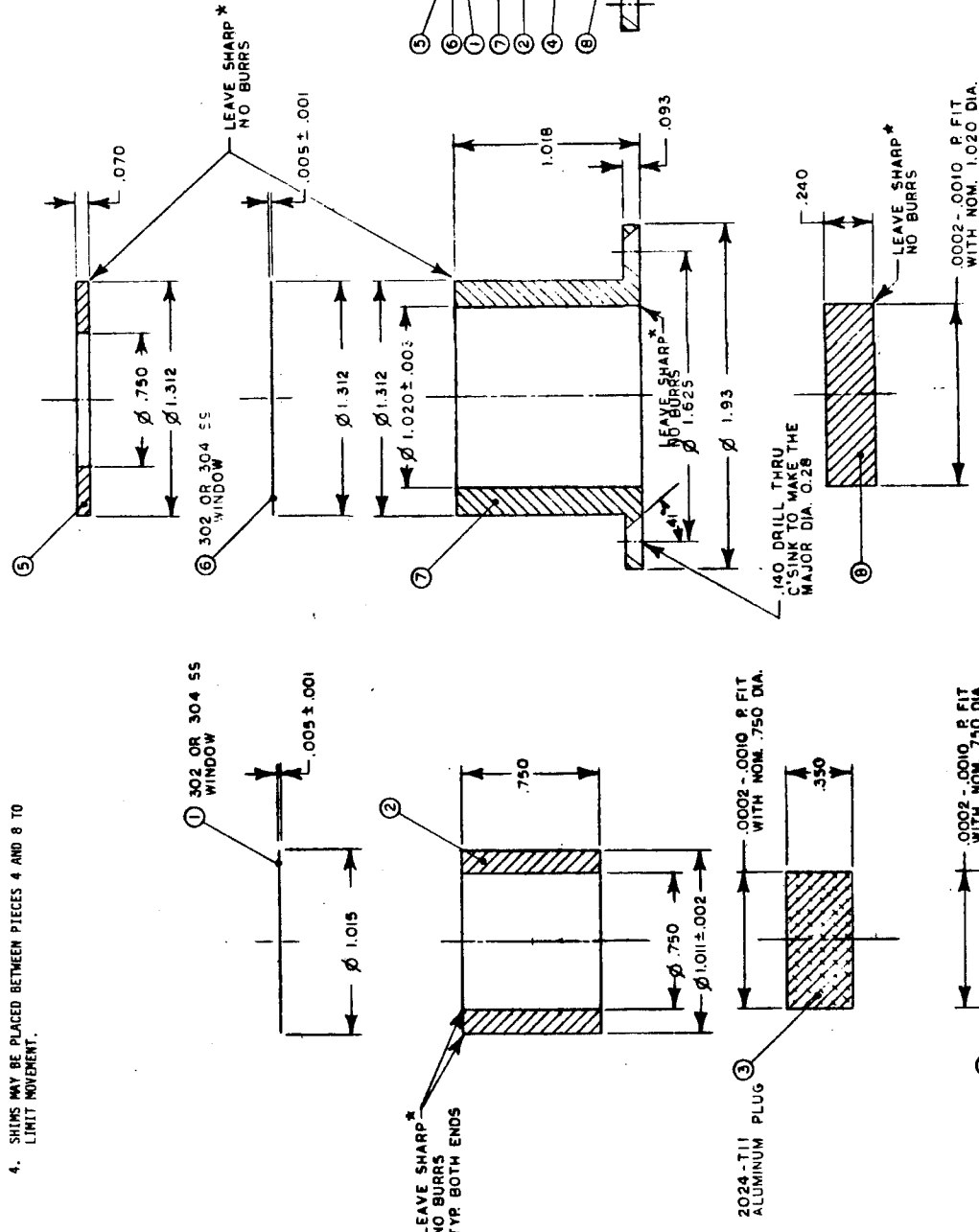
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(DATE)

Revision 5 -      Issued to restrict use to shipments intended for recycling or disposal and to extend the expiration date.

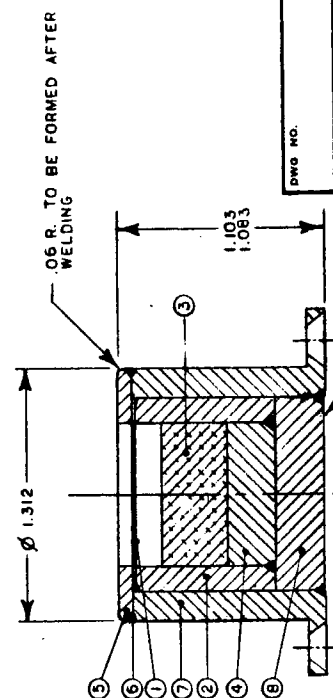
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**NOTES:**

1. HEMMETIC SEAL WELDS ARE TO BE MADE BETWEEN PIECES 1 AND 2, 2 AND 4, 4, 6 AND 7, 7 AND 8.
2. UNLESS OTHERWISE SPECIFIED:  
BREAK OUTSIDE CORNERS .010 - .020\*  
RADIUS INSIDE CORNERS .010\*
- \*INDICATES VISUAL INSPECTION IS ACCEPTABLE.
3. SHIMS MAY BE PLACED BETWEEN PIECES 4 AND 8 TO LIMIT MOVEMENT.



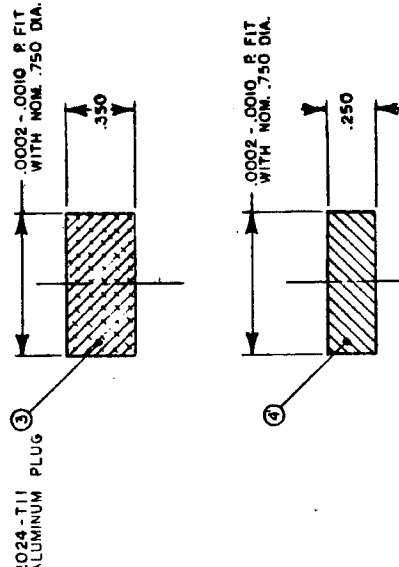
## ASSEMBLY



PC 8 TO BE RECESSED INTO PC 7  
APPROX. .010  
NO WELD BUILD-UP ON PC 7 IS  
PERMITTED WHEN WELDING PC 8  
TO PC 7, MACHINING OR GRINDING.  
IS PERMITTED TO REMOVE EXCESS  
WELD MATERIAL

DWG NO.	REV
SHEET OF	

OUTER



# INNER

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES: DECIMALS: .015 FRACTIONS: 1/64		MS APPD 9/8/80 QA APPD 9/10/80 MP APPD 9/10/80 DE APPD 9/10/80 CHECKED 9/11/80 DRAWN HAN 9/30/80 FINISH ----- MATERIAL 2024-T3 EXCEPT AS NOTED		MONSANTO RESEARCH CORPORATION DAYTON LABORATORY DAYTON, OHIO REPLACES A2404-AACO AND B2404-AACO REV 0 C2404-AAOI SCALE 2X WT ACT. SHEET OF	
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